

0550  
0111

OIPE

#2

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/016,647

DATE: 01/03/2002  
 TIME: 13:41:11

Input Set : A:\LEX-0284-USA SEQLIST.txt  
 Output Set: N:\CRF3\01032002\J016647.raw

4 <110> APPLICANT: Friddle, Carl Johan  
 5 Hilbun, Erin  
 6 Turner, C. Alexander Jr.  
 8 <120> TITLE OF INVENTION: Novel Human Ion Channel Protein and Polynucleotides Encoding  
 the Same  
 10 <130> FILE REFERENCE: LEX-0284-USA  
~~12~~ 12 <140> CURRENT APPLICATION NUMBER: US/10/016,647  
~~12~~ 12 <141> CURRENT FILING DATE: 2001-12-10  
 12 <150> PRIOR APPLICATION NUMBER: US 60/257,932  
 13 <151> PRIOR FILING DATE: 2000-12-20  
 15 <160> NUMBER OF SEQ ID NOS: 3  
 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 1278  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: homo sapiens  
 24 <400> SEQUENCE: 1  
 25 atgaccctcg ggcgcagcgg ggcggcctcg gtgggtctga acgtggcgg cgcccggtat 60  
 26 tcgctgtccc gggagctgct gaaggacttc cgcgtcgcc gcgtgagccg gctgcacggc 120  
 27 tgccgctccg agcgcgacgt gctcgaggtg tgcgacgact acgaccgcga ggcgaacgag 180  
 28 tacttcttcg accggcaactc ggaggccttc ggcttcatec tgctctacgt ggcggccac 240  
 29 ggcagaagctgc gcttcgcgc gccggatgtgc gagctctcct tctacaacgaa gatgatctac 300  
 30 tggggcctgg agggcgcgca cctcgagttac tgctgccage gccgcctcga cgaccgcgt 360  
 31 tccogacacacct acacccctta ctcggccgac gagccggcgt tgctggccg cgacgaggcg 420  
 32 cgccccggcg gggccgaggg gcgtcccttc aggccgtggc tggagcgtat gcggcggacc 480  
 33 ttccgaggagc ccacgtcgtc gctggccgcg cagatcctgg cttagcgtgtc ggtgggttgc 540  
 34 gtgatcgtgt ccatgggttg gctgtgcgcg agcacatttc cccactggcg caacgcagcc 600  
 35 ggcgcacaacc gcagccttga tgaccggagc aggataattt aagctatctg cataggttgg 660  
 36 ttcaactgcgg agtgcatttcgt gaggttcattt gtctccaaaa acaagtgtga gtttgcataag 720  
 37 agacccctga acatcattga ttactggca atcacgcgtt attacatctc tgtgttgatg 780  
 38 acagtgttta caggcgagaa ctctcaactc cagagggtcg gagtcacccctt gagggtaactt 840  
 39 agaatgtga ggatttttg ggtgattaag cttgcggcgtc acttcatttttgc tcttcagaca 900  
 40 ctccggtttga ctctcaaacg ttgttaccga gagatggta ttgttacttgt cttcattttgt 960  
 41 gttggccatgg caatcttttag tgcaattttctt cagcttcttgc aacatgggtt ggacccggaa 1020  
 42 acatccaaca aggactttac cagcatttcgt gctgcctgtc gttgggttat tatctctatg 1080  
 43 actacagtttgc gctatggaga tatgtatccctt atcacagtgc ctggaaagaat tcttgagga 1140  
 44 gtttgggttg tcagtggaaat ttgttctatttgc gcattaccta tcacttttat ctaccatagc 1200  
 45 ttgtgcagt gttatcatga gctcaagttt agatctgtca ggtatagtag gggccctcc 1260  
 46 actgaatttcc tgaattaa 1278  
 48 <210> SEQ ID NO: 2  
 49 <211> LENGTH: 425  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: homo sapiens  
 53 <400> SEQUENCE: 2  
 54 Met Thr Phe Gly Arg Ser Gly Ala Ala Ser Val Val Leu Asn Val Gly  
 55 1 5 10 15  
 56 Gly Ala Arg Tyr Ser Leu Ser Arg Glu Leu Leu Lys Asp Phe Pro Leu  
 57 20 25 30

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/016,647

DATE: 01/03/2002  
TIME: 13:41:11

Input Set : A:\LEX-0284-USA SEQLIST.txt  
Output Set: N:\CRF3\01032002\J016647.raw

58 Arg Arg Val Ser Arg Leu His Gly Cys Arg Ser Glu Arg Asp Val Leu  
 59           35                          40                          45  
 60 Glu Val Cys Asp Asp Tyr Asp Arg Glu Arg Asn Glu Tyr Phe Phe Asp  
 61       50                          55                          60  
 62 Arg His Ser Glu Ala Phe Gly Phe Ile Leu Leu Tyr Val Arg Gly His  
 63 65                          70                          75                          80  
 64 Gly Lys Leu Arg Phe Ala Pro Arg Met Cys Glu Leu Ser Phe Tyr Asn  
 65       85                          90                          95  
 66 Glu Met Ile Tyr Trp Gly Leu Glu Gly Ala His Leu Glu Tyr Cys Cys  
 67       100                          105                          110  
 68 Gln Arg Arg Leu Asp Asp Arg Met Ser Asp Thr Tyr Thr Phe Tyr Ser  
 69       115                          120                          125  
 70 Ala Asp Glu Pro Gly Val Leu Gly Arg Asp Glu Ala Arg Pro Gly Gly  
 71       130                          135                          140  
 72 Ala Glu Ala Ala Pro Ser Arg Arg Trp Leu Glu Arg Met Arg Arg Thr  
 73 145                          150                          155                          160  
 74 Phe Glu Glu Pro Thr Ser Ser Leu Ala Ala Gln Ile Leu Ala Ser Val  
 75       165                          170                          175  
 76 Ser Val Val Phe Val Ile Val Ser Met Val Val Leu Cys Ala Ser Thr  
 77       180                          185                          190  
 78 Leu Pro Asp Trp Arg Asn Ala Ala Asp Asn Arg Ser Leu Asp Asp  
 79       195                          200                          205  
 80 Arg Ser Arg Ile Ile Glu Ala Ile Cys Ile Gly Trp Phe Thr Ala Glu  
 81       210                          215                          220  
 82 Cys Ile Val Arg Phe Ile Val Ser Lys Asn Lys Cys Glu Phe Val Lys  
 83 225                          230                          235                          240  
 84 Arg Pro Leu Asn Ile Ile Asp Leu Leu Ala Ile Thr Pro Tyr Tyr Ile  
 85       245                          250                          255  
 86 Ser Val Leu Met Thr Val Phe Thr Gly Glu Asn Ser Gln Leu Gln Arg  
 87       260                          265                          270  
 88 Ala Gly Val Thr Leu Arg Val Leu Arg Met Met Arg Ile Phe Trp Val  
 89       275                          280                          285  
 90 Ile Lys Leu Ala Arg His Phe Ile Gly Leu Gln Thr Leu Gly Leu Thr  
 91       290                          295                          300  
 92 Leu Lys Arg Cys Tyr Arg Glu Met Val Met Leu Leu Val Phe Ile Cys  
 93 305                          310                          315                          320  
 94 Val Ala Met Ala Ile Phe Ser Ala Leu Ser Gln Leu Leu Glu His Gly  
 95       325                          330                          335  
 96 Leu Asp Leu Glu Thr Ser Asn Lys Asp Phe Thr Ser Ile Pro Ala Ala  
 97       340                          345                          350  
 98 Cys Trp Trp Val Ile Ile Ser Met Thr Thr Val Gly Tyr Gly Asp Met  
 99       355                          360                          365  
 100 Tyr Pro Ile Thr Val Pro Gly Arg Ile Leu Gly Gly Val Cys Val Val  
 101       370                          375                          380  
 102 Ser Gly Ile Val Leu Leu Ala Leu Pro Ile Thr Phe Ile Tyr His Ser  
 103 385                          390                          395                          400  
 104 Phe Val Gln Cys Tyr His Glu Leu Lys Phe Arg Ser Ala Arg Tyr Ser  
 105       405                          410                          415  
 106 Arg Ser Leu Ser Thr Glu Phe Leu Asn

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/016,647

DATE: 01/03/2002  
TIME: 13:41:11

Input Set : A:\LEX-0284-USA SEQLIST.txt  
Output Set: N:\CRF3\01032002\J016647.raw

107	420	425	
109 <210> SEQ ID NO: 3			
110 <211> LENGTH: 1844			
111 <212> TYPE: DNA			
112 <213> ORGANISM: homo sapiens			
114 <400> SEQUENCE: 3			
115 ggcggggcgg ccgcccggatt cgccggccca gggagcgccg gagacgggga gctattccgc	60		
116 cccggcggct ccattcggcg cccgcagccc tcagggggtc ggccccggcgg ctggggagag	120		
117 ggcacccgccc cctcgggtgt cgccagccctc gggcgcgagg gtccggccggc cggacacagc	180		
118 cgccgttccca gcccgggggg ctcagcgctg gcccggccga ggactccccg gccacccgca	240		
119 ggtaccgccc ggcggaggggc gcgcgtactag cagcgccgga gatactcgag cccagggacc	300		
120 cccggggccaag cggaggggcag gagcggagcc cccggggggc acggcgccct	360		
121 ccccccgtcaag ccacgggcag gcaggccccg cgtggccgct tggggtgggg ggctgcagcg	420		
122 gggccctcgg gccgaaagtcc ccccgccgg ccagccatga cttcggccg cagcggggcg	480		
123 gcctcgggtgg tgctgaacgt gggcgccgc cggattcgc tgccggggta gctgctgaag	540		
124 gacttcccgc tgcgcgcgt gaggccggctg cacggctgcc gctccgagcg cgacgtgctc	600		
125 gaggtgtgcg acgactacga ccgcgcgcgc aacgagact tcttcgaccg gcactcgag	660		
126 gcctcggct tcatctgct ctacgtgcgc ggccacggca agctgcgtt cgcggccgg	720		
127 atgtgcgagc ttccttcta caacgagatg atctactggg gcctggagggg cgccgcaccc	780		
128 gagtactgct gccagcgccg ctcgcacgc acgcgttccg acacctacac cttctactcg	840		
129 gccgacgcgc cggcggtgt gggccgcgc gaggcgcc cccggggggc cgaggcgct	900		
130 cccctccagggc gctggctgg ggcgcacgc cggaccttcg aggagccac gtcgtcgctg	960		
131 gccgcgcaga tcctggctag cgtgtcggtg gtgttcgtga tcgtgtccat ggtgggtgt	1020		
132 tgcgcgcaga cgttgcgcga ctggcgcaac gcagccgcgc acaaccgcag cctggatgac	1080		
133 cggagcggaga taatttgcata tatctgcata ggttggttca ctgcccggatg catcggtagg	1140		
134 ttcatattgtct caaaaacaa gtgtgagtt gtcaagagac ccctgaacat cattgattta	1200		
135 ctggcaatca cggcgatatta catctctgtt ttgtatgacag tttttacagg cgagaactct	1260		
136 caactccaga gggctggagt caccttgagg gtacttagaa tttttgggtt 1320	1320		
137 attaagcttgc cccgtcaattt cattttgtttt cttttttttt cttttttttt 1380	1380		
138 taccgagaga tgggttatgtt acttgtcttc atttgtttt ccatggcaat cttttttttt 1440	1440		
139 ctttctcgc ttcttgcaca tgggtggac ctggaaaacat ccaacaaggaa ctttaccaggc 1500	1500		
140 attcctgtgt cctgtgggtt ggtgttatttc tttttttttt cttttttttt 1560	1560		
141 tttttttttt tttttttttt tttttttttt tttttttttt 1620	1620		
142 ctattttttttt tttttttttt tttttttttt tttttttttt 1680	1680		
143 aagttttttttt tttttttttt tttttttttt tttttttttt 1740	1740		
144 gcaaatcaat tttttttttt tttttttttt tttttttttt 1800	1800		
145 tttttttttt tttttttttt tttttttttt tttttttttt 1844	1844		

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/016,647

DATE: 01/03/2002

TIME: 13:41:12

Input Set : A:\LEX-0284-USA SEQLIST.txt

Output Set: N:\CRF3\01032002\J016647.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date